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## **Acceptability of a tailored Mediterranean lifestyle education resource among patients with mild cognitive impairment: a qualitative study**

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ACCEPTABILITY OF A TAILORED MEDITERRANEAN LIFESTYLE EDUCATION RESOURCE AMONG PATIENTS WITH MILD COGNITIVE IMPAIRMENT: A QUALITATIVE STUDY

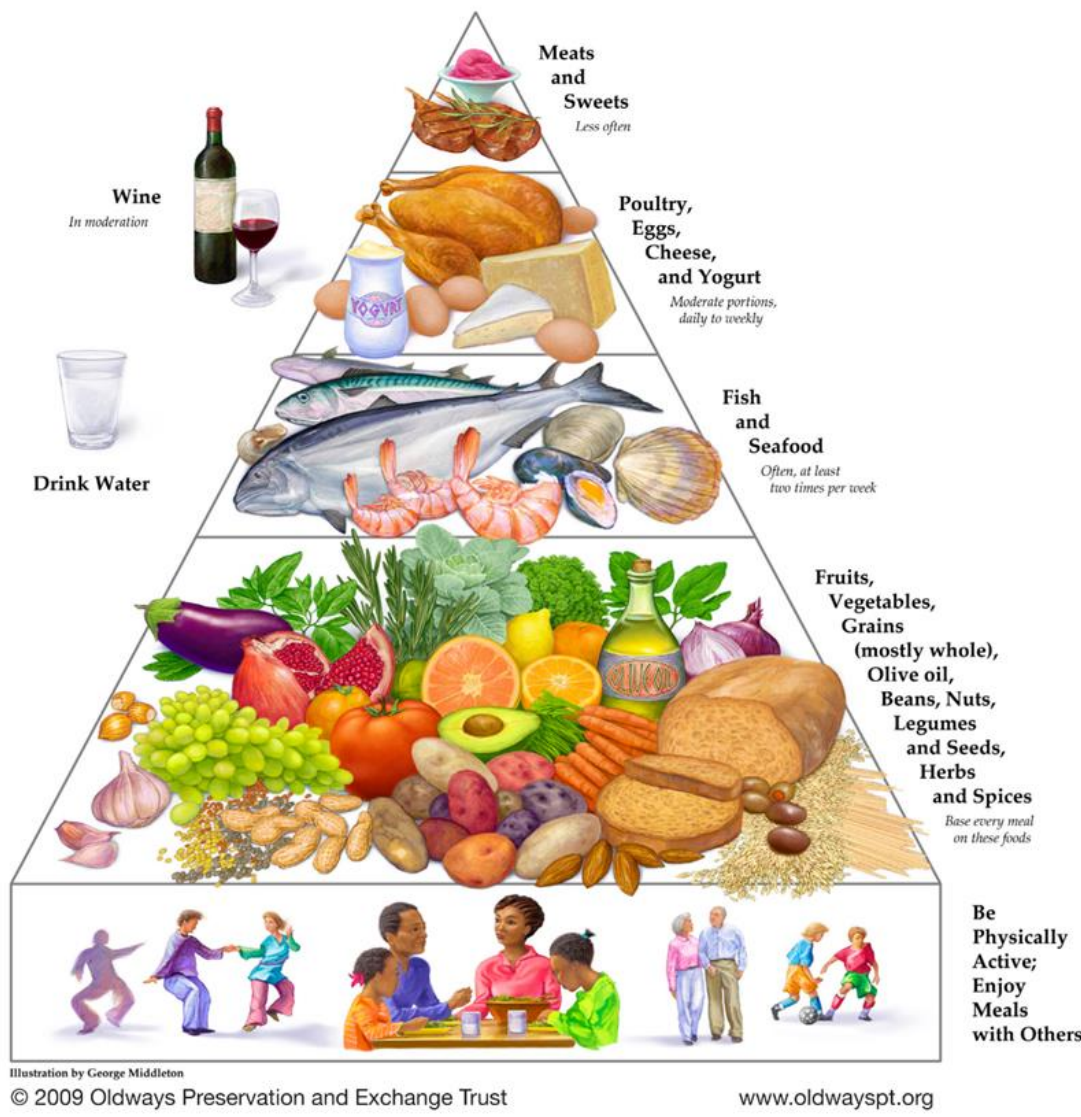
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BACKGROUND

Research evidence suggests that greater adherence to a traditional Mediterranean diet (MD) is neuroprotective and may help reduce dementia risk. There is a need to understand how best to achieve behaviour change towards a MD, particularly in non-Mediterranean and high-risk populations, for example, individuals with Mild Cognitive Impairment (MCI).

Changing dietary and lifestyle behaviour is complex and is a challenge faced by clinicians and researchers. The Medical Research Council framework for developing complex interventions (Craig et al., 2008) suggests that interventions grounded in theory have been deemed more effective. The Theoretical Domains Framework (TDF) (Michie et al., 2014) is based on 14 theoretical domains and is used to help design, develop and deliver behaviour change interventions. It can ensure the specific needs of the population are targeted and the various barriers and enablers to dietary change are understood by the researchers in order to maximise engagement in the proposed intervention.

We developed a MD educational resource for MCI patients in accordance with the MRC guidance (Craig et al., 2008), based on a systematic literature review and informed by qualitative work (Neville et al., 2013) with the target group. This refined resource was evaluated by structured interviews with MCI patients using the TDF framework (Michie et al., 2014).



AIM

The aim of the current research was to evaluate the acceptability of a Mediterranean Lifestyle Education Resource with MCI patients and to understand the barriers and enablers to dietary change in this population group.

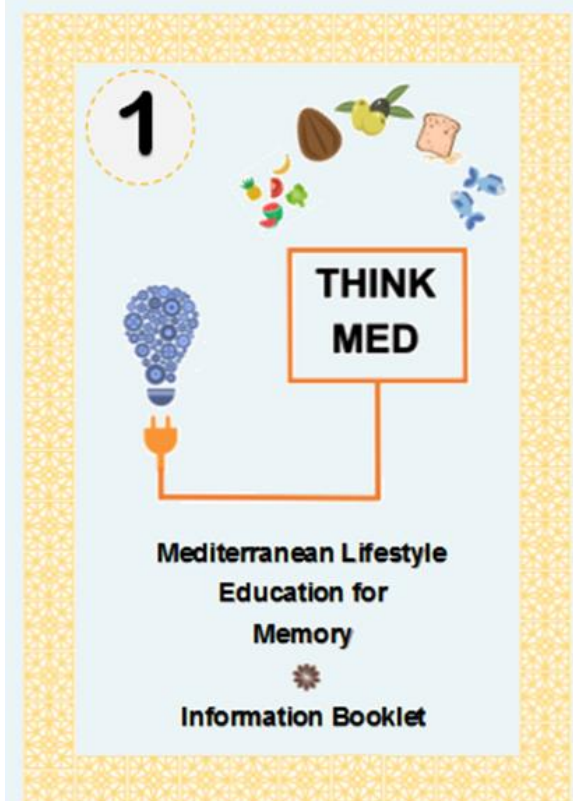
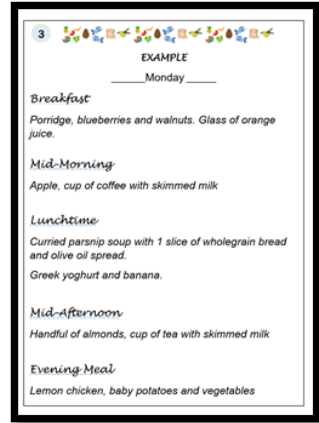
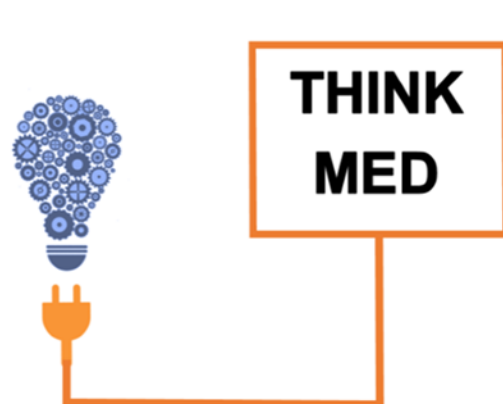
METHODS

MCI patients were recruited from memory clinics to participate in structured interviews. An interview topic guide was developed using the Theoretical Domains Framework (TDF) (Michie et al., 2014).



Figure 1: Theoretical Domains Framework (TDF) (Michie et al., 2014)

- The Mediterranean Lifestyle Education Resource, “THINK-MED” consisted of:
- 1) Mediterranean Lifestyle Education for Memory - Information Leaflet
  - 2) Four seasonal recipe books
  - 3) 7-day Mediterranean Diet menu plans
  - 4) Mediterranean Lifestyle Education for Memory – Memory Book
  - 5) Calendar



This resource was posted out to participants one week before the interview for their review.

Interviews were transcribed verbatim and a theoretical thematic analysis framework, as outlined by Braun and Clarke (2006), was applied to the transcribed data. The TDF was used as an initial coding framework and was then expanded to reflect the emerging themes from the study.

RESULTS AND DISCUSSION

n=8 MCI patients (plus two relatives) took part in structured interviews (mean age = 77.0 years). Seven interviews took place face-to-face in the Centre for Public Health, QUB with one via telephone as this was more convenient for the interviewee. There were an equal number of male and female participants.

A summary of the key findings, matched to the appropriate TDF domain is detailed below.

**TDF Domain: Knowledge and skills**

The majority of participants had an awareness of the Mediterranean diet through previous travel experiences, the media, or family and friends. However, none of the participants knew that the Mediterranean diet had a link with memory.

The role of cooking within the household was mainly facilitated by one member (either participant or their partner) and if the participant suggested that they did not do most of the cooking, they were involved in assisting with preparation or shopping.

**TDF Domain: Beliefs about Capabilities**

Some participants felt that there was too much information and this made them feel overwhelmed. They welcomed the staging of information in smaller parts. However, despite this some participants were happy to receive the information on one occasion.

Having support was suggested to impact on a person's ability to succeed with making dietary changes.

**TDF Domain: Memory, attention and decision processes**

Understandably, the effects of an MCI diagnosis were highlighted by participants. Many indicated that as a result, they employ strategies to help them remember e.g. writing things down.

One participant described his memory loss as “frightening” and that it would be something he would “like to try and fight”. It was clear that acceptance of a diagnosis or condition could be an important concept to consider before making any dietary changes.

**TDF Domain: Optimism**

The general consensus among the participants was that they were optimistic in regards to changing towards a MD. It was clear that they could be motivated to change their dietary and lifestyle behaviour for a variety of reasons. Mostly, it was due the perceived benefits that this change could have on their memory and overall health.

**TDF Domain: Intentions and Goals**

Generally participants regarded goal setting as an interesting and important concept however, there were mixed opinions on the method used to achieve this and some felt writing down goals to record them could be too prescriptive and would be less inclined to do so.

Encouragingly, all participants indicated that, since reading the resource, they had actively made changes or have considered making future changes to their diet. However, some participants commented that they were reluctant to change their dietary intake entirely to that of a Mediterranean diet.

**TDF Domain: Environmental Context and Resources**

Overall the Mediterranean lifestyle education resource was well received, being described as “Really very well done, well set out and very attractive”, “clear and easy to understand” and “its attractive... it's an attractive booklet... it just appealed”.

Some felt that the resource could benefit from more direction for the reader to signpost to other parts of the resource. Some participants felt that they would have preferred some simpler recipe options or suggested they would like to vary the ingredients used.

“I had no clear knowledge that there was an association with memory”

“Well we knew that the Mediterranean diet was so healthy, but we didn't know it was significant in memory”

“I find that I need to write it all down, write it out again”

“Why I'm doing it is that I have accepted the fact that I have got this memory loss”

“Well I've a feeling that my memory isn't as good, in fact I'm sure it's not, I just see a deterioration”

“Probably a Mediterranean diet wouldn't appeal to me on a Sunday... I probably wouldn't want to do it every day”

“We have resolved independently that I don't want to eat steak again”

“I think it would probably encourage us to make a few additional changes that perhaps we haven't made before...”

“I wouldn't be bothered doing all that”

“The goal setting was quite interesting and perhaps a useful thing for people to attempt... the idea of breaking it down in to sort of small steps”

“Maybe there are others who would need a bit of help or support throughout but I'm happy just doing it myself”

“My first reaction was shock when I saw how much information there was...”

“Well I think I would be very happy because my wife and I are doing it together...”

“If it helps, I definitely would try it”

“I am prepared to try these”

“The payoff is obviously magnificent because if it retards or reduces memory loss then it's a positive”

“Some of the recipes are impractical... like ourselves, when you're pensioners and that, would have a smallish lunch, but it wouldn't be anything very elaborate that would take long to cook or prepare”

“I thought there was a good introduction on mild cognitive impairment which I wasn't really totally familiar with what it implied”

“Reading those with diagrams on it is much easier and it tells you how much you should eat of those meals”

“I had a rough idea about it, and then from reading your information, put more of a shape to it... and took away a lot of the hesitancy I had about it”

CONCLUSION

The aim of this qualitative study was to evaluate the acceptability of a tailored Mediterranean Lifestyle Education resource with MCI patients. Analysis of the interview feedback received using the TDF, highlighted important themes and constructs relevant to this target group. Overall, the resource was well received by participants, however discussions highlighted the need to consider adaptations so that the educational resources and associated intervention could be tailored to the needs of an older population.

This information was used to further refine the Mediterranean Lifestyle education resource, “THINK-MED”, before its evaluation through a pilot randomised controlled trial, which is currently underway.